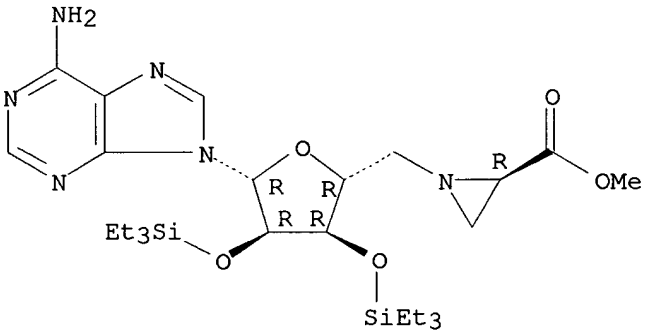
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of aziridine-based cofactor mimics of nucleosides via aziridination as the key step)

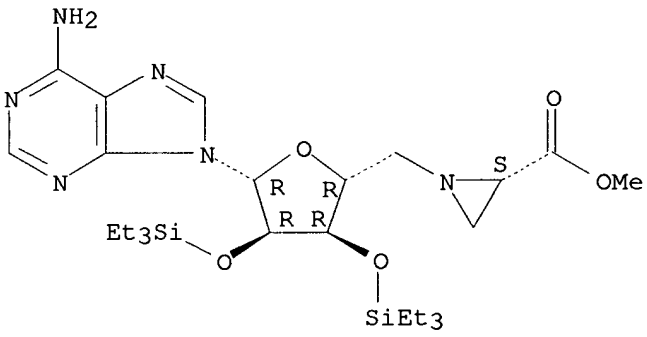
RN 473907-70-9 CAPLUS
CN Adenosine, 5'-deoxy-5'-[(2R)-2-(methoxycarbonyl)-1-aziridinyl]-2',3'-bis-O-(triethylsilyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



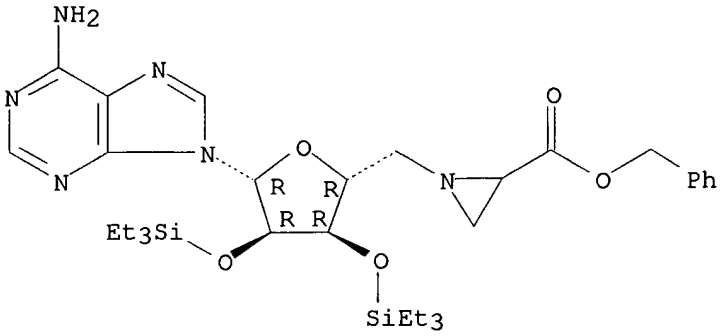
RN 473907-71-0 CAPLUS
CN Adenosine, 5'-deoxy-5'-[(2S)-2-(methoxycarbonyl)-1-aziridinyl]-2',3'-bis-O-(triethylsilyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



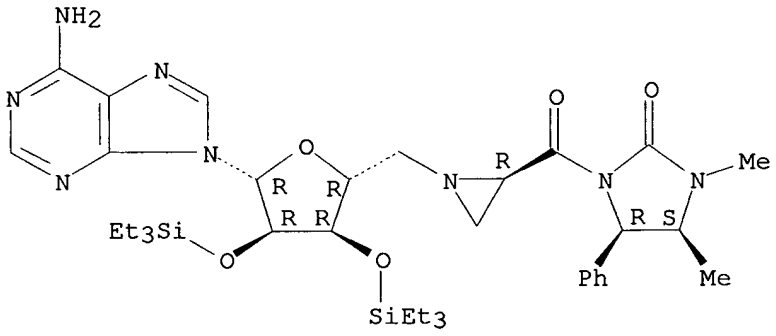
RN 473907-72-1 CAPLUS
CN Adenosine, 5'-deoxy-5'-[2-[(phenylmethoxy)carbonyl]-1-aziridinyl]-2',3'-bis-O-(triethylsilyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



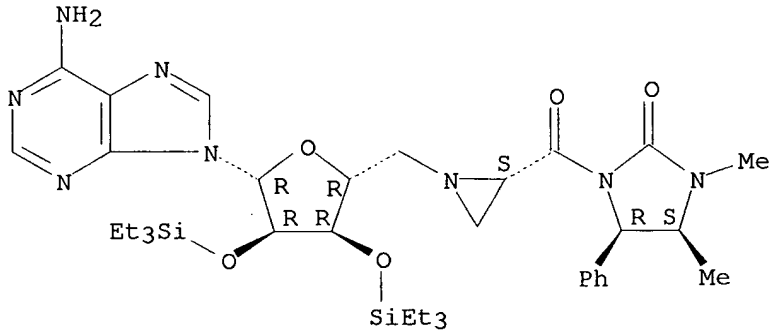
RN 473907-78-7 CAPLUS
CN Adenosine, 5'-deoxy-5'-[(2R)-2-[[(4S,5R)-3,4-dimethyl-2-oxo-5-phenyl-1-imidazolidinyl]carbonyl]-1-aziridinyl]-2',3'-bis-O-(triethylsilyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 473907-79-8 CAPLUS
CN Adenosine, 5'-deoxy-5'-[(2S)-2-[[(4S,5R)-3,4-dimethyl-2-oxo-5-phenyl-1-imidazolidinyl]carbonyl]-1-aziridinyl]-2',3'-bis-O-(triethylsilyl)- (9CI) (CA INDEX NAME)

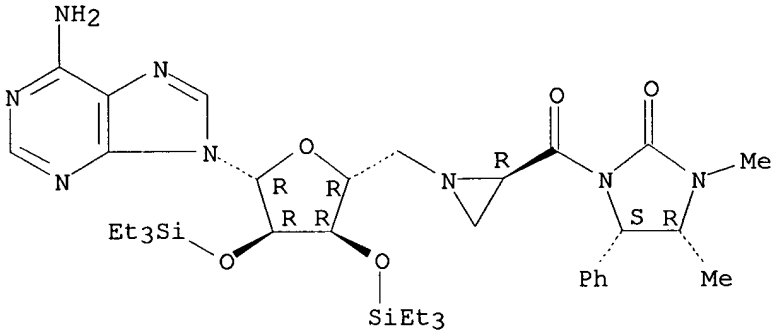
Absolute stereochemistry.



RN 473907-81-2 CAPLUS

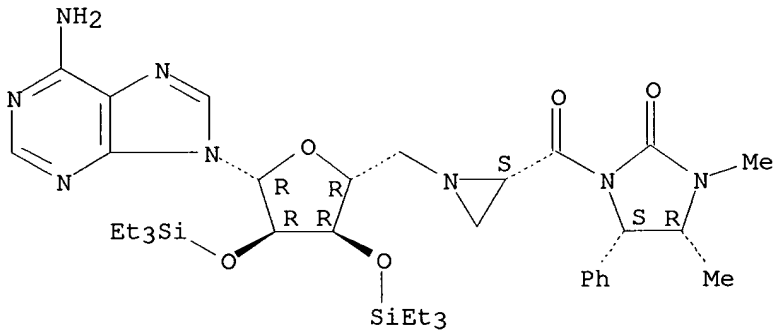
CN Adenosine, 5'-deoxy-5'-[(2R)-2-[[(4R,5S)-3,4-dimethyl-2-oxo-5-phenyl-1-imidazolidinyl]carbonyl]-1-aziridinyl]-2',3'-bis-O-(triethylsilyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



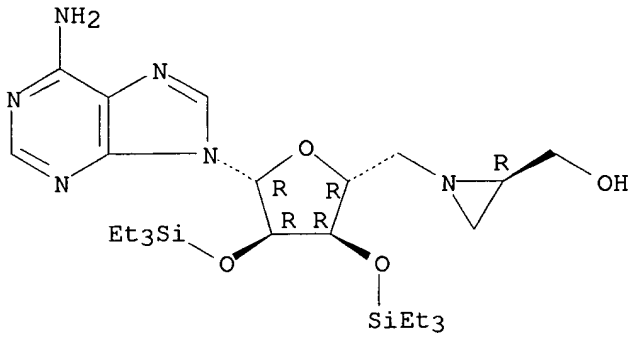
RN 473907-82-3 CAPLUS
CN Adenosine, 5'-deoxy-5'-[(2S)-2-[[(4R,5S)-3,4-dimethyl-2-oxo-5-phenyl-1-imidazolidinyl]carbonyl]-1-aziridinyl]-2',3'-bis-O-(triethylsilyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



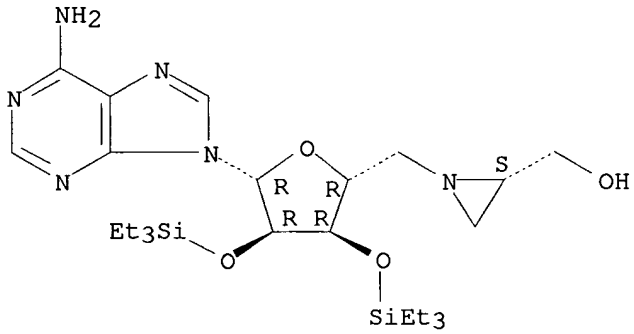
RN 473907-83-4 CAPLUS
CN Adenosine, 5'-deoxy-5'-[(2R)-2-(hydroxymethyl)-1-aziridinyl]-2',3'-bis-O-(triethylsilyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



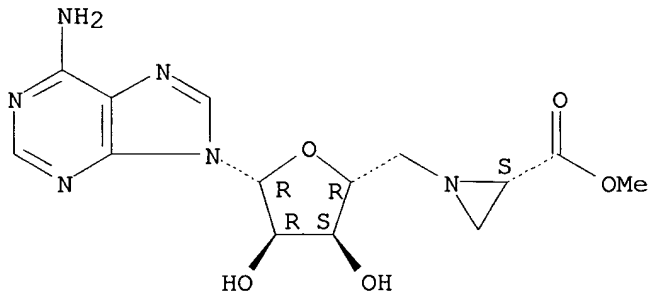
RN 473907-84-5 CAPLUS
CN Adenosine, 5'-deoxy-5'-[(2S)-2-(hydroxymethyl)-1-aziridinyl]-2',3'-bis-O-(triethylsilyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



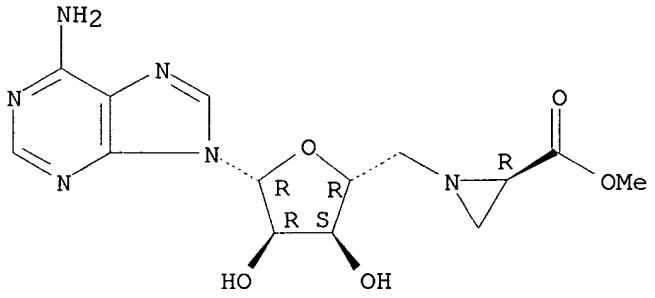
IT **473907-73-2P 473907-74-3P 473907-75-4P**
473907-76-5P 473907-85-6P 473907-86-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of aziridine-based cofactor mimics of nucleosides via aziridination as the key step)
RN 473907-73-2 CAPLUS
CN Adenosine, 5'-deoxy-5'-[(2S)-2-(methoxycarbonyl)-1-aziridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



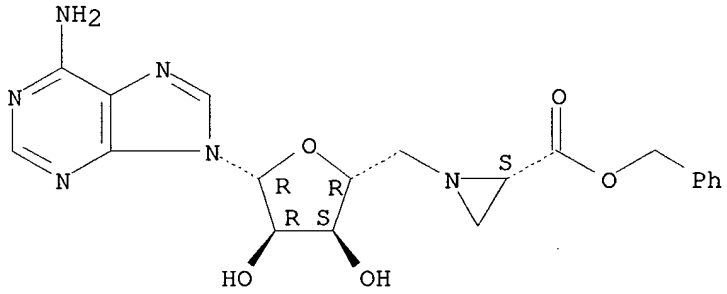
RN 473907-74-3 CAPLUS
CN Adenosine, 5'-deoxy-5'-[(2R)-2-(methoxycarbonyl)-1-aziridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



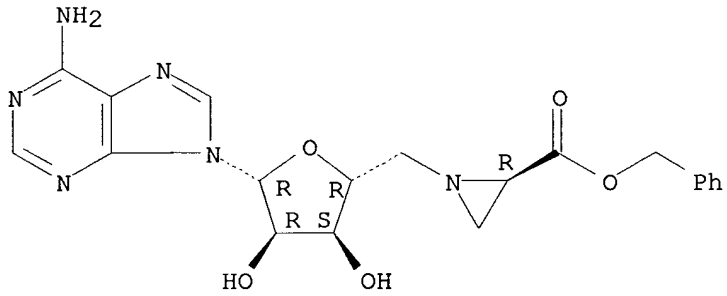
RN 473907-75-4 CAPLUS
CN Adenosine, 5'-deoxy-5'-[(2S)-2-[(phenylmethoxy)carbonyl]-1-aziridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



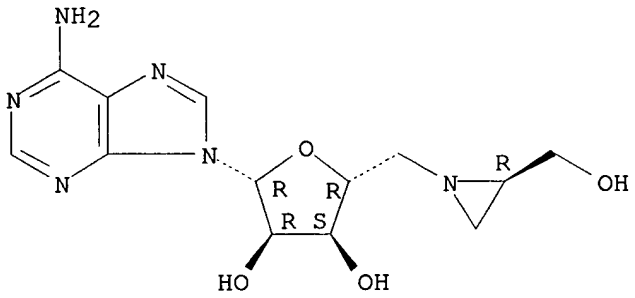
RN 473907-76-5 CAPLUS
CN Adenosine, 5'-deoxy-5'-[(2R)-2-[(phenylmethoxy)carbonyl]-1-aziridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



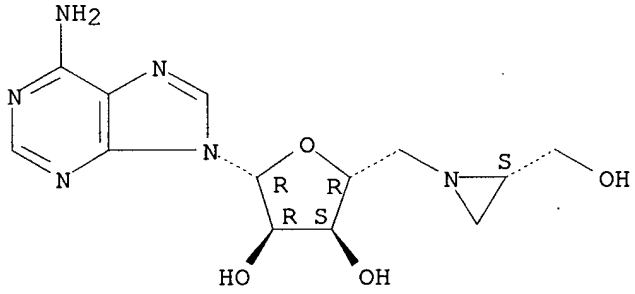
RN 473907-85-6 CAPLUS
CN Adenosine, 5'-deoxy-5'-[(2R)-2-(hydroxymethyl)-1-aziridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 473907-86-7 CAPLUS
CN Adenosine, 5'-deoxy-5'-[(2S)-2-(hydroxymethyl)-1-aziridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:459574 CAPLUS
DOCUMENT NUMBER: 133:222946
TITLE: Synthesis of 5'-N-(2-[18F]Fluoroethyl)-carboxamidoadenosine: a promising tracer for investigation of adenosine receptor system by PET technique
AUTHOR(S): Lehel, Sz.; Horvath, G.; Boros, I.; Mikecz, P.; Marian, T.; Szentmiklosi, A. J.; Tron, L.
CORPORATE SOURCE: Positron Emission Tomograph Centre, University Medical School of Debrecen, Debrecen, H-4026, Hung.
SOURCE: Journal of Labelled Compounds & Radiopharmaceuticals (2000), 43(8), 807-815
CODEN: JLCRD4; ISSN: 0362-4803
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 133:222946
AB 5'-N-(2-[18F]Fluoroethyl)-carboxamidoadenosine ([18F]FNECA), a promising 18F-labeled adenosine agonist has been prepared by two different synthetic routes. In the first, [18F]fluoride was reacted with 5'-N,N-ethylene-

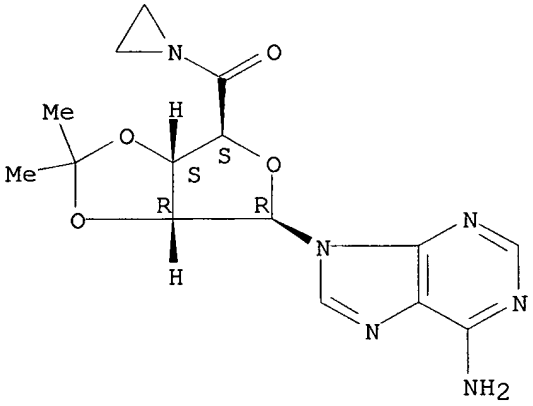
2',3'-O-isopropylidenecarboxamido-adenosine and, after removing the protective group, [18F]FNECA was obtained in a low radiochem. yield (1±1%, mean±sd, n=7, decay corrected). In the second, 2-[18F]fluoroethylamine was synthesized according to the literature and reacted with 2',3'-O-isopropylideneadenosine-5'-uronic acid in the presence of a coupling agent. The following hydrolysis step provided the [18F]FNECA with a modest radiochem. yield (24±9%, n=17, based on [18F]fluoride-activity). After purification by preparative reverse phase HPLC 18.9-166.5 MBq (0.51-4.5 mCi) [18F]FNECA was obtained with a specific activity of 2.35±1.14 TBq/mmol (63.5±30.9 Ci/mmol, n=3). The total synthesis took 200 min and the decay corrected radiochem. yield based on [18F]F- activity was 17±9% (n=5) with more than 99.9% radiochem. purity. This second route provides sufficient [18F]FNECA for the subsequent biol. evaluation using PET-technique.

IT **291771-77-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of ([18F]fluoroethyl)carboxamidoadenosine, a promising tracer for investigation of adenosine receptor system by PET technique)

RN 291771-77-2 CAPLUS

CN Adenosine, 5'-(1-aziridinyl)-5'-deoxy-2',3'-O-(1-methylethylidene)-5'-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:98580 CAPLUS

DOCUMENT NUMBER: 132:148496

TITLE: Aziridine-containing cofactors for methyltransferases and their use in labeling of nucleic acids and proteins

INVENTOR(S): Pignot, Marc; Weinhold, Elmar

PATENT ASSIGNEE(S): Max-Planck-Gesellschaft Zur Forderung Der Wissenschaften E.V., Germany

SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

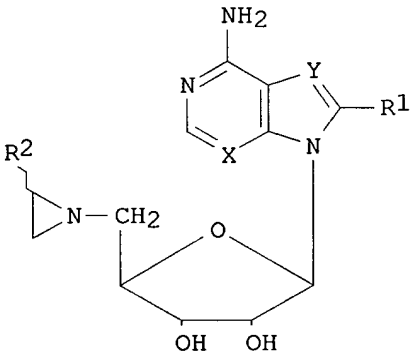
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006587	A1	20000210	WO 1999-EP5405	19990728
W: CA, JP, LT, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2338721	AA	20000210	CA 1999-2338721	19990728
EP 1102781	A1	20010530	EP 1999-938363	19990728
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002521488	T2	20020716	JP 2000-562384	19990728

PRIORITY APPLN. INFO.: EP 1998-114201 A 19980729
WO 1999-EP5405 W 19990728

OTHER SOURCE(S): MARPAT 132:148496
GI



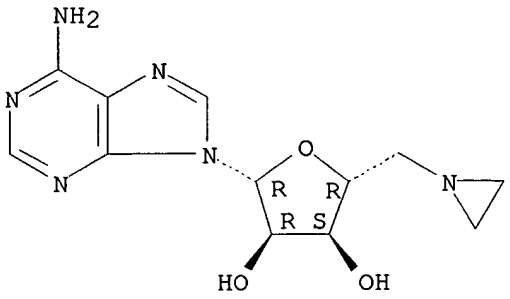
I

AB Aziridine derivs. [I; X=N, CH; Y=N, CR3; R1,R3=H, 3H, NH(CH2)nNHR4, NH(C2H5O)nC2H5NHR4; R4=fluorophore, affinity tag, crosslinking agent, peptides, etc.; n=1-5000; R2=R1, CH2CH(COOH)(NH2)] are disclosed which can be used as cofactor for S-adenosyl-L-methionine-dependent methyltransferases. I and methyltransferases may be used to label nucleic acids and proteins. Thus, I (X,Y=N; R1,R2=H) was synthesized and used to label double-stranded oligonucleotide substrates of DNA methyltransferase TaqI and HhaI.

IT **219497-87-7P**
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(aziridine-containing cofactors for methyltransferases and their use in labeling of nucleic acids and proteins)

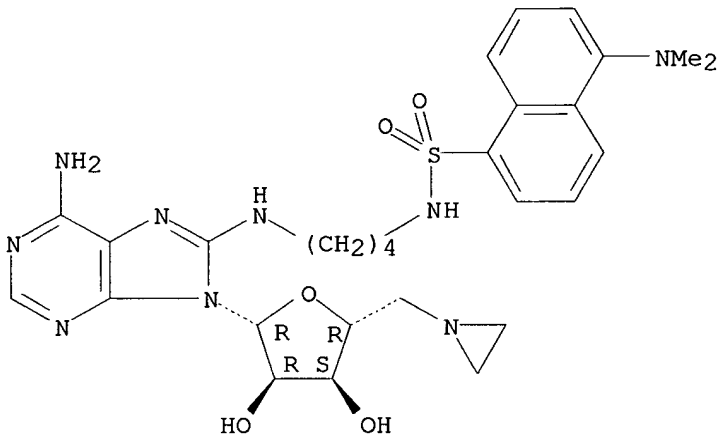
RN 219497-87-7 CAPLUS
CN Adenosine, 5'-(1-aziridinyl)-5'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **256953-68-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(aziridine-containing cofactors for methyltransferases and their use in labeling of nucleic acids and proteins)
RN 256953-68-1 CAPLUS
CN Adenosine, 5'-(1-aziridinyl)-5'-deoxy-8-[[4-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]butyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:745696 CAPLUS
DOCUMENT NUMBER: 130:106802
TITLE: Coupling of a nucleoside with DNA by a methyltransferase
AUTHOR(S): Pignot, Marc; Siethoff, Christoph; Linscheid, Michael; Weinhold, Elmar
CORPORATE SOURCE: Max-Planck-Institut Molekulare Physiologie, Abteilung Physikalische Biochemie, Dortmund, D-44139, Germany
SOURCE: Angewandte Chemie, International Edition (1998), 37(20), 2888-2891
CODEN: ACIEF5; ISSN: 1433-7851
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal

LANGUAGE: English

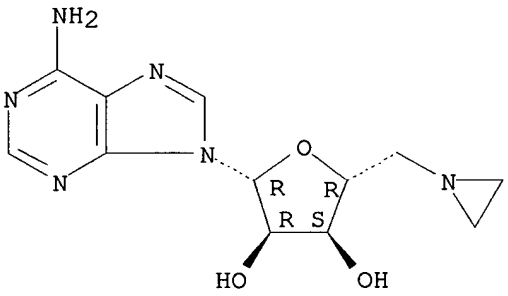
AB S-Adenosyl-L-methionine-dependent methyltransferase (Mtases) catalyze the transfer of the activated Me group from the cofactor S-adenosyl-L-methionine to sulfur, nitrogen, oxygen and carbon acceptors of small mols., phospholipids, RNA and DNA with specificity. The authors present the first example of a Mtase-catalyzed formation of a covalent bond between a group larger than a Me group and the substrate for a Mtase. N-adenosylaziridine was synthesized and tested as a substrate for Thermus aquaticus DNA Mtase.

IT **219497-87-7P**
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(coupling of a nucleoside with DNA by a methyltransferase using N-adenosylaziridine, a S-adenosyl-L-methionine analog)

RN 219497-87-7 CAPLUS

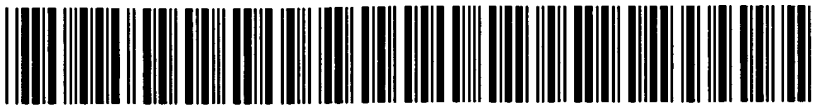
CN Adenosine, 5'-(1-aziridinyl)-5'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

US 097446410HP1



Creation date: 04-26-2004
Indexing Officer: JPERRY - JONATHAN PERRY
Team: OIPEBackFileIndexing
Dossier: 09744641

Legal Date: 03-27-2003

No.	Doccode	Number of pages
1	SRNT	46
2	NPL	6

Total number of pages: 52

Remarks:

Order of re-scan issued on .....